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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,088	04/29/2002	Robert Asam	221414US2PCT	4451
22850	7590	04/15/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MULL, FRED H	
			ART UNIT	PAPER NUMBER
			3662	
DATE MAILED: 04/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/089,088

**Applicant(s)**

ASAM, ROBERT

**Examiner**

Fred H. Mull

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-~~32~~<sup>33</sup> is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because of the informalities indicated by the attached Form PTO 948. The replacement drawings did not contain a replacement drawing for Fig. 3C. Therefore, the objection to the old Fig. 3C remains. Corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Response to Arguments***

2. Applicant's arguments with respect to Busack have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16, 20-21, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Cavallaro.

In regard to claim 16, Cavallaro discloses a vehicle-information device provided in each of a plurality of racecars (col. 4, lines 16-18), each said vehicle-information device comprising: a positioning device configured to obtain positioning data relating to the position of the respective racecar at any time during the race, and at any location on the racetrack (64, Fig. 2; col. 4, lines 39-51); and a transmitter configured to transmit the positioning data (66; col. 5, line 8); a central unit equipped with at least one receiver and configured to receive the transmitted positioning data (col. 5, lines 8-9); a memory configured to store track data of the racetrack (col. 4, lines 19-38; col. 10, lines 43-67); and a calculation device configured to calculate positions of the racecars on the racetrack from the received positioning data of the respective racecars and the stored track data (col. 5, lines 8-16 and 26-31).

In regard to claim 20, Cavallaro further discloses at least one of the positioning devices obtains the positioning data from satellite supported positioning data (64; col. 7, lines 18-19).

In regard to claim 21, Cavallaro further discloses at least one of the vehicles includes at least one device configured to obtain vehicle operating data or positioning data, transmitted by its respective vehicle-information device to the central unit (68).

In regard to claim 27, Cavallaro further discloses a display device configured to visually display a current position of one or more vehicles on the track using the track data and the vehicle positions (col. 5, lines 8-16 and 26-31).

In regard to claim 28, Cavallaro further discloses a data-processing device configured to edit selected racing information contained in the positioning system and feed the selected racing information to a network such that a display of the racing data is possible with visual data-processing devices networked by the data-processing device (col. 5, lines 26-31).

In regard to claim 29, Cavallaro further discloses the data-processing device and the visual data-processing devices are networked by the Internet (col. 5, lines 26-31).

In regard to claim 30, Cavallaro further discloses the data-processing device permits an interactive selection of the respective racing information to be displayed and a respective type of display by a user of the respective visual data-processing devices (col. 5, lines 26-31).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-22, 27, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swensen.

In regard to claim 16, Swensen discloses a vehicle-information device provided in each of a plurality of vehicles, each said vehicle-information device comprising:

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a positioning device configured to obtain positioning data relating to the position of the respective vehicle at any time, and at any location (col. 14, line 47 to col. 15, line 21); and

a transmitter configured to transmit the positioning data (col. 4, lines 38-50);

a central unit equipped with at least one receiver and configured to receive the transmitted positioning data (col. 4, lines 55-58); a memory configured to store track data of the track (col. 15, lines 55-64); and

a calculation device configured to calculate positions of the vehicles on the track from the received positioning data of the respective vehicles and the stored track data (col. 15, 35-48).

Swensen discloses his system is applied to railroad trains rather than racecars. However, the two are analogous art because they solve the same problem, tracking a moving vehicle in real-time along a known track. It would have been obvious to use the system of Swensen to track any moving vehicle in real-time that moves along a known track, such as racecars moving along a racetrack.

In regard to claim 17, Swensen further discloses using at least three direction-finding receives for positioning (col. 16, lines 3-5; Fig. 16).

In regard to claim 18, Swensen further discloses determining the locations and tracking a plurality of vehicles (col. 4, lines 56-57).

In regard to claim 19, Swensen further discloses wherein the first and second plurality of racecars wholly correspond (col. 4, lines 56-57).

In regard to claim 20, Swensen further discloses at least one of the positioning devices obtains the positioning data from a direction-finding receiver (col. 14, line 47 to col. 15, line 21).

In regard to claim 21, Swensen further discloses at least one of the vehicles includes at least one device configured to obtain vehicle operating data or positioning data, transmitted by its respective vehicle-information device to the central unit (col. 14, line 47 to col. 15, line 21).

In regard to claim 22, Swensen further discloses the positioning and operating data is configured to be wholly or partially encrypted when transmitted (col. 4, lines 34-37).

In regard to claim 27, Swensen further discloses a display device configured to visually display a current position of one or more vehicles on the track using the track data and the vehicle positions (col. 15, lines 46-48).

In regard to claim 31, Swensen further discloses that the racetrack is represented by an ordered sequence of corner points (col. 15, lines 63-64).

In regard to claim 32, it would be obvious to update the track information when the track is redesigned or modified in some way.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cavallaro in view of IDS document Saller (DE 4005913 A1).

Cavallaro discloses that the positioning and operating data will be used to provide a service over the internet (col. 5, lines 26-31). Cavallaro fails to disclose

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encrypting the positioning and operating data. Saller discloses encrypting data that will be used to provide a service to a subscriber in order to prevent the users from accessing that data directly and avoiding payment for subscriptions to access the data (English abstract). It would have been obvious to encrypt the positioning and operating data of Cavallaro in order to deny access to users who would otherwise pay for access to the data, as motivated by Saller.

6. Claim 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cavallaro in view of IDS document Martell and Smith.

Cavallaro fails to disclose a transmitter configured to transmit safety information to a receiver in at least one of the racecars. Martell discloses a transmitter broadcasting safety information to receivers in racecars (abstract; Fig. 1). Smith discloses providing safety information to vehicles when they are within a proximity zone to a hazardous activity (abstract). It would have been obvious to take advantage of the positioning and other vehicle data available to the central unit in order to identify vehicle problems as soon as possible and broadcast safety information to the drivers, particular ones close to the vehicle with problems, which are the ones most in danger, in order to prevent accidents that could potentially injure or kill drivers or spectators (e.g. when tires fly into the crowd).



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7. Claim 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swensen in view of IDS document Martell and Smith.

Swensen fails to disclose a transmitter configured to transmit safety information to a receiver in at least one of the racecars. Martell discloses a transmitter broadcasting safety information to receivers in racecars (abstract; Fig. 1). Smith discloses providing safety information to vehicles when they are within a proximity zone to a hazardous activity (abstract). It would have been obvious to take advantage of the positioning and other vehicle data available to the central unit in order to identify vehicle problems as soon as possible and broadcast safety information to the drivers, particular ones close to the vehicle with problems, which are the ones most in danger, in order to prevent accidents that could potentially injure or kill drivers or spectators (e.g. when tires fly into the crowd).

8. The examiner also finds the following reference(s) relevant:

Milnes, which discloses a system similar to that of Cavallaro, where position and other sensor outputs are used to determine statistics about racecars to enhance a video presentation of the race.

Morimoto, which discloses a system similar to that of Smith.

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 703-305-1250. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 703-360-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred H. Mull  
Examiner  
Art Unit 3662

fhm

  
GREGORY C. ISSING  
PRIMARY EXAMINER